

## Synthesis of SiO<sub>x</sub>C<sub>y</sub> thin film with Dielectric Barrier Discharge Plasma

오승천<sup>†</sup>, 신중욱, 류재홍

고등기술연구원

(seung1000@iae.re.kr<sup>†</sup>)

Atmospheric pressure- Dielectric Barrier Discharge(DBD) Plasma was recognized as promising and cost effective methods for wide-area surface treatment on sheets of steel, glass, polymeric web, etc.

In this study, SiO<sub>x</sub>C<sub>y</sub> thin films were deposited by using dielectric barrier discharge plasma. The characteristic of SiO<sub>x</sub>C<sub>y</sub> thin films were investigated as a function of the HMDSO/O<sub>2</sub>/He flow rate. The SiO<sub>x</sub>C<sub>y</sub> thin films were characterized by the Fourier-transformed Infrared(FT-IR) spectroscopy, Auger Electron Spectroscopy(AES), Field Emission Scanning Electron Microscope(FE-SEM), and X-Ray Diffraction(XRD). Detailed experimental results will be demonstrated through the present work.